

TO: RETI Stakeholder Steering Committee &
RETI Coordinating Committee
FROM: Alliance for Responsible Energy Policy (AREP)
SUBJECT: **Comments on the RETI Phase 1A Draft Report**
DATE: March 25, 2008

Thank you for the opportunity to comment on RETI's Phase 1A Report. AREP will offer: General Comments; Specific Comments related to Technological Assumptions, and; General Conclusion about the RPS Goals and RETI Process.

GENERAL COMMENTS

In reviewing the RETI Phase 1A Draft we have found that the study and preparation of the report is in urgent need of a comprehensive treatment of environmental issues. Substantive investigation and analysis are necessary in order to balance environmental covenants and requirements with corporate cost-benefit goals. We are concerned that the inclusion of environmental groups in this process has not advanced important environmental topics in an effective manner. We have also found that AB-32 and California's RPS goals are greatly lacking logical and careful study. It is necessary to create plans and objectives that take into consideration the total effect on our environment.

SPECIFIC COMMENTS ON TECHNOLOGICAL ASSUMPTIONS

Anaerobic Digestion Has multiple positive environmental impacts and is a significant contributor to greenhouse gas emissions but is likely to be ignored by RETI because it is largely viewed as a distributed source.

Landfill Gases The combustion of Land Filled Gases (LFG) releases pollutants into the atmosphere similar to fossil fuels. Processing combustion of LFG requires construction of plants to house and run reciprocating engines. The RETI Phase 1A Draft Report does not address the environmental impact caused by construction and operation of reciprocating engine plants.

Solar Thermal Concentrated Solar Projects (CSP) requires tens of thousands of acres of land (7 to 10 acres per MW). Construction of CSPs requires scraping, blasting and drilling, destroying habitat and compromising the desert ecosystem. Wet cooled plants and washing mirrors use millions of gallons of precious desert water each year and contaminates ground water aquifers. CSPs are hybrids producing up to 25% of their energy from burning fossil fuels. The construction of CSP and corresponding access roads and fencing will further disrupt plant and animal habitat including migration, mating patterns and damage of many species.

Solar Photovoltaic As the draft report notes photovoltaic (PV) systems are unobtrusive to the environment and human health. Projections for utility-scale PV systems are considered cost prohibitive and are ruled out on that basis. However, the distributed application of PV systems is not considered by RETI as distributed PV precludes transmission. In fact, the entire potential of wide-spread distributed PV generation is excluded from consideration of energy need.

Hydroelectric The draft report notes that damming rivers has significant environmental impacts. It points to the fact that migration of fish and spawning habits are seriously disrupted, it also notes that damming floods valleys, wilderness and residential areas and disrupts archeological remains. The report mentions that altering natural water-ways destroys ecosystems that depend upon downstream flows. All across our nation and around the planet humans are destroying dams built decades ago as we have learned about their destructive impact on the environment. Demonstrating a lack of research in environmental concerns, the draft report recommends hydroelectric sites as cost-effective and reliable sources of generation that can provide substantial amounts of energy.

Geothermal The report contends geothermal development has relatively few environmental impacts. However, it ignores the land area that must be set aside for the power plants, substations, power lines and access roads in remote areas. Disruption of habitat from exploration activities, drilling and pipelines are noted but are summarily dismissed by re-vegetated efforts – conclusions which are inefficient and short-sighted.

Wind The report notes environmental considerations associated with wind turbines such as visual and noise impacts, avian fatalities and other wildlife burdens. Ridgelines are often disrupted for maximum wind capture. However, infrastructure land preparation, access roads and destruction of native plant and animal habitats are not addressed.

GENERAL CONCLUSION RE: RPS GOALS AND RETI PROCESS
AB-32, SB-1059 and RETI (evidenced in the RETI Phase 1A Draft Report) have:

- Preconceived utility-scale energy need without benefit of careful analysis.
- Structurally ruled-out participation and consideration of energy generation and conservation alternatives which eliminate need for remote utility-scale projects and resulting long-distance transmission.
- Fast-tracked regulatory and environmental covenants that protect public and private lands.

The RETI Phase 1A Draft Report demonstrates an unbalanced overview between vital environmental components and long-distance transmission. The report predominantly ignores site destruction and transmission impacts, which are significant. It also fails to supply a comprehensive overview of all energy possibilities such as local generation of wind and solar, conservation and distributed generation.

While the focus of the RETI 1A Draft Report looks to the future, the true wave of the future is in point of use system technologies, which are readily available. Energy planning that does not take into account many of the great advances in technology and energy awareness is ultimately antiquated and untenable.

Respectfully submitted,
The Alliance for Responsible Energy Policy

ENERGY

2 big projects will amp up solar power in Southland

Edison plans a massive installation of photovoltaic cells on rooftops, and FPL Energy proposes a 250-megawatt plant.

By Andrea Chang, Los Angeles Times Staff Writer
March 27, 2008

Solar energy is getting a big boost in Southern California with the unveiling of two projects that will be capable of generating a total of 500 megawatts of electricity, enough to serve more than 300,000 homes.

Gov. Arnold Schwarzenegger and Southern California Edison plan to announce today the country's largest rooftop solar installation project ever proposed by a utility company. And on Wednesday, FPL Energy, the largest operator of solar power in the U.S., said it planned to build and operate a 250-megawatt solar plant in the Mojave Desert.

The projects would help California meet its goal of obtaining 20% of its electricity from renewable sources by 2010. In 2006, about 13% of the retail electricity delivered by Edison and the state's other two big investor-owned utilities came from renewable sources such as sun and wind, according to the California Public Utilities Commission.

Energy experts were struck by the size of the two projects, which would bolster the state's current total of about 965 megawatts of solar power flowing to the electricity grid.

"Five hundred megawatts -- that's substantial," said spokesman George Douglas of the National Renewable Energy Laboratory. "Projects of that size begin to show that solar energy can produce electricity on a utility scale, on the kind of scale that we're going to need."

The Edison rooftop project will place photovoltaic cells on 65 million square feet of commercial building roofs in Southern California. The cells will generate as much as 250 megawatts of electricity -- enough to power about 162,500 average homes, based on the utility's estimate that one megawatt would serve about 650 average homes.

"These are the kinds of big ideas we need to meet California's long-term energy and climate change goals," Schwarzenegger said in a statement. "If commercial buildings statewide partnered with utilities to put this solar technology on their rooftops, it would set off a huge wave of renewable-energy growth."

The project, subject to approval by state utility regulators, will cost an estimated \$875 million and take five years to complete, Edison spokesman Gil Alexander said. The utility, a subsidiary of Edison International, plans to begin installation work immediately on commercial roofs in San Bernardino and Riverside counties and spread to other locations in Southern California at a rate of one megawatt a week.

The first of the solar rooftops, which will use advanced photovoltaic generating technology, is expected to be in service by August.

"This is a breakthrough. This is hugely accelerating to a scale that is the largest in the country -- a kind of virtual solar generation facility," John E. Bryson, chairman and chief executive of Edison International, said in an interview. "It's a big

deal for the state of California; it's a big deal for the renewable-energy sector."

Rosemead-based Southern California Edison provides power to 13 million people in a 50,000-square-mile area of Central and Southern California.

FPL Energy's proposed 250-megawatt plant, dubbed the Beacon Solar Energy Project, will be situated on about 2,000 acres in eastern Kern County.

More than half a million parabolic mirrors will be assembled in rows to receive and concentrate the sun's rays to produce steam for a turbine generator -- a process known as solar thermal power. The generator will produce electricity for delivery to a nearby electric grid. Construction is scheduled to begin in late 2009 and will take about two years to complete, the Juno Beach, Fla.-based company said.

"At a time of rising and volatile fossil-fuel costs and increasing concerns about greenhouse gases, solar electricity can have a meaningful impact," FPL Energy President Mitch Davidson said in a statement. "We believe that solar power has similar long-term potential as wind energy, and we are well positioned to play a leading role in the growth of this renewable technology."

Longer term, the company aims to add at least 600 megawatts of new solar by 2015. FPL Energy currently has facilities with a capacity to produce 310 megawatts of solar power.

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Sent: 3/27/2008 2:11 PM

Greetings:

AREP would like to add this information to our comments on the RETI Phase 1A Draft Report. Attached is an article from today's LA Times noting SCE's plan to generate 500 megawatts from rooftops. What if:

- a.. PG&E, LADWP, SDG&E, IID, and SMUD followed SCE's lead
- b.. Southern California Public Power Agencies (SCPPA) encouraged it's municipal member cities; Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Pasadena, Riverside and Veron to follow SCE's lead
- c.. Norther California Power Agency (NCPA) encouraged it's municipal member cities; Biggs, Gridley, Healdsburg, Lompoc, Palo Alto, and Ukiah, along with it's other members Alameda Power & Telecom, Bay Area Rapid Transit District, Lodi Electric Utility, Roseville Electric, Silicon Valley Power, Truckee Donner PUD, and Turlock Irrigation District to follow SCE's lead

How many utility-scale solar and wind projects and corresponding transmission lines would not be necessary in California? Given this potential doesn't it make sense for our energy policy makers to consider a shift in focus from an "Ordinary Risk Analysis" (How much environmental damage will be allowed) to the "Precautionary Principle" (How little environmental damage is possible)?

AREP asks our energy policy makers to also consider what if the Western Governor's Association (WGA) followed this lead and promoted rooftop solar first before sacrificing the wilderness to concentrated solar, wind farms and transmission lines. Could all the proposed and future proposed utility-scale projects within the West-wide Energy Corridor become unnecessary.

AREP realizes these are big questions that require study. However, we are convinced that our energy policy makers should dedicate themselves to the "Precautionary Principle" to find answer to these reasonable and important questions. We believe you owe that consideration to our future generations. AREP thanks you for time, dedication and assistance and reminds you that our striving to save the planet should not sacrifice the wilderness.

Respectfully submitted,
The Alliance for Responsible Energy

From: "John Viola" <john.viola5@verizon.net>
To: "Traci Bone" <tbo@cpuc.ca.gov>, "Robin Smuty-Jones" <rsmutney-jones@cais...
Date: 3/27/2008 7:42 PM
Subject: Error

Greetings:

Apologize for the error: The SCE rooftop plan generates 250 megawatts not 500 megawatts.

The Alliance for Responsible Energy